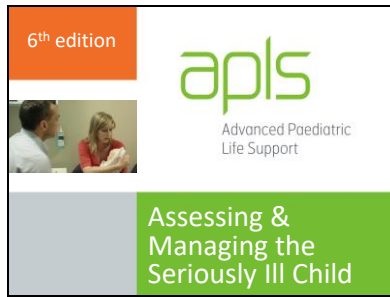


Slide 1



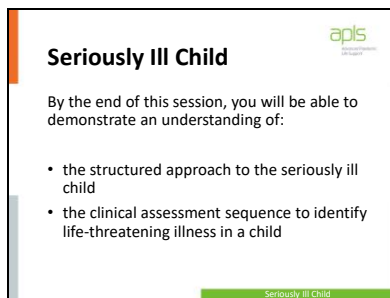
Instructor Notes

This session is 45 mins.

- Read notes on facilitating plenaries.
- Plan to be at the end of case 2 (Hannah) at the 20-22 minute mark. Groups can work quite quickly through case 2 (differential is age), especially as they know what is expected of them after working through the first case.

These slides have been set up to reveal the answers and because of the table layout they do this by making overlay boxes disappear. Therefore, to check on the way the information appears you should look at this presentation in slide show view. After the summary slide there is a blank slide (19) and after this (20-28) you can view the case slides in their 'completed' state for ease of reference.

Slide 2



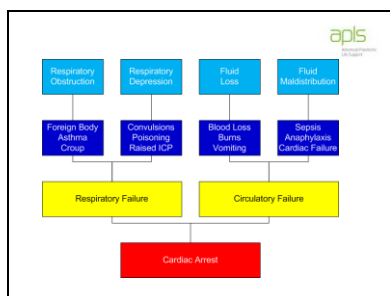
This will be the first plenary when candidates are not in their usual colour groups.

Brief assistant for this session to support those arriving late – regarding where to sit & if the small group has commenced – a brief overview of each case.

Consider commencing the session in a usual plenary style and moving into groups of 3-4 after slide 4 (Rapid Assessment).

Sit candidates in groups (3-4 people each group). They will need pen, clip board and 2 double sided copies per group of the A4 Serious Illness Activity Sheet

Slide 3



Pathways to cardiac arrest

Talk about how assessment and intervention with the conditions on the top of the slide can prevent or slow progression to the serious consequences on the bottom of the slide.

This involves rapid assessment of the seriously ill child (summarised on next slide).

Be brief – this and the next slide is recall from pre-reading and the online learning.

Slide 4

| Airway & Breathing | Circulation | Disability |
|--------------------|-----------------------|------------------|
| Effort | Heart rate | Conscious level |
| Efficacy | Capillary refill time | Posture & Pupils |
| Effects | Blood pressure | |
| | Skin temperature | |

In Disability also mention along with posture COLOUR & TONE

This slide has animation.

Rapid assessment features are emphasised in the online learning – this slide is a prompt for recall of pre-course learning. Give candidates the ‘space’ to provide the answers.

Slide 5

David is a one and a half year old child who has had a runny nose and now has a barking cough and noisy breathing.

On arrival at hospital he is clinging to his mother when disturbed and his breathing sounds harsh.

Note each of the following 4 cases have a focus: David (airway), Hannah (breathing), Phillip (circulation), Sally (disability)

Present this case and the following slide and invite candidates to discuss in their groups the initial resuscitation and then think about the differential diagnosis of upper airway obstruction and the specific interventions that should be given.

Invite candidates to provide answers to next two slides, including any other key features that they can think of before moving on to Hannah’s case, eg

anaphylaxis - allergen exposure & urticaria – IM adrenaline

poor conscious level – airway opening

manoeuvres, definitive airway

This approach will mean candidates break out for discussion on eight occasions.

Slide 6

| | On examination | Resuscitation |
|---|---|--|
| A | Inspiratory stridor | Call for help |
| B | Recession ++ rate 50/min SpO ₂ in air 88 % | High flow oxygen Nebulised adrenaline Do not upset |
| C | Pulse 190/min | |
| D | Drowsy but agitated when disturbed | Reassess |

Allow 2 minutes

Slide 7

| Key Feature | Diagnosis | Treatment |
|--------------------------------|--------------|------------------------------|
| Harsh stridor, barking cough | Croup | Adrenaline Dexamethasone |
| Drooling, soft stridor, sepsis | Epiglottitis | Secure airway Ceftriaxone |
| Possible history of FB | Foreign body | Removal technique |
| Harsh stridor with sepsis | Tracheitis | Cefotaxime or Ceftriaxone |

Show key features and ask for diagnosis and emergency treatment.

Ask whether there are any other key features / diagnoses not listed here.

Allow 4 minutes

Slide 8

Hannah's case

Hannah is a two month old baby with a runny nose and a cough for two days.

Now her feeding is poor and she is sleeping more than usual. Her mother is worried about her breathing.

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 Seriously Ill Child

Present this case and the following slide and invite candidates to discuss in their groups the initial resuscitation and then think about the differential diagnosis of lower airway obstruction and the specific interventions that should be given.

Invite candidates to provide answers to next two slides, including any other key features that they can think of before moving on to Phillip's case, eg

anaphylaxis - allergen exposure & urticaria – IM adrenaline

Slide 9

Hannah's case: Primary assessment and resuscitation

| | On examination | Resuscitation |
|---|---|---|
| A | Patent | Call for help |
| B | Expiratory wheeze Recession + SpO ₂ 90% in air | Maintain airway High flow oxygen |
| C | Heart rate 180/min Pale | Blood glucose |
| D | Drowsy AVPU | Monitor for apnoea Reassess |

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 Seriously Ill Child

Allow 2 minutes

Slide 10

**Hannah's case:
 What emergency treatment?**

| Key Feature | Diagnosis | Treatment |
|--------------|---------------|--|
| Under 1 year | Bronchiolitis | Oxygen and monitor breathing for apnoea, ensure adequate hydration |
| Over 1 year | Asthma | +/- Steroids and bronchodilators |

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Show key features and ask for diagnosis and emergency treatments.

Allow 2 minutes

Over 1 year – repeated event, Hx atopy/eczema

Ideally you are ½ way through the session at the end of this. If not, consider running Phillip's case as a whole group activity – less candidates will be actively involved, but it will be preferable to running out of time for the 4th case (Sally's)

Slide 11

Phillip's case

Phillip is three years old. He has had a fever and been drowsy for just a few hours, but he is so unlike his usual active self that his mother is really worried about him and has brought him to Emergency Department.

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Present this case and the following slide and invite candidates to discuss in their groups the initial resuscitation and then think about the differential diagnosis of circulatory failure and the specific interventions that should be given.

Invite candidates to provide answers to next two slides, including any other key features that they can think of before moving on to Sally's case, eg

bilious vomiting, abdominal pain and distension – surgical abdomen
 pallor and splenomegaly – severe anaemia

Slide 12

Phillip's case: Primary assessment and resuscitation

| | On examination | Resuscitation |
|---|--|--|
| A | Patent | Call for help |
| B | Resp rate 40/min SpO ₂ not recordable No significant recession | Maintain airway (may need later intubation) High flow oxygen |
| C | Pale Heart rate 170/min Weak peripheral pulses BP 65 mmHg systolic CRT 4 sec | IV access and fluids (may need 2 to 3 boluses) Bloods Reassess |
| D | AVPU | |

Seriously Ill Child

Allow 2 minutes

Slide 13

Phillip's case: What emergency treatment?

| Key Feature | Diagnosis | Treatment |
|------------------------|----------------------|---------------------------------------|
| Vomiting/ Diarrhoea | Gastroenteritis | IV/IO Fluid |
| Fever and rash | Septicaemia | IV/IO Fluid Antibiotics |
| Allergen, urticaria | Anaphylaxis | Adrenaline |
| Signs of heart failure | CHD / Cardiomyopathy | Diuretics, inotropes Prostaglandin |
| Abnormal rhythm on ECG | Arrhythmia | Arrhythmia algorithms |
| High blood glucose | Diabetes | Fluid Insulin |

Seriously Ill Child

Show key features and ask for diagnosis and emergency treatment.

Ask whether there are any other key features / diagnoses not listed here.

E.g. bilious vomiting, abdominal pain and distension – surgical abdomen
 pallor and splenomegaly – severe anaemia

Allow 4 minutes

Note Prostaglandin is in 'grey' font, as a teaching point for infants pg 76-77 (not suitable for Phillip – who is 3 yrs old)

Slide 14

Sally's case

Sally is 13 years old. She has been found unconscious in the local park.

She has been brought by paramedics and her friend says that they haven't been doing anything (but she smells of alcohol)

Seriously Ill Child

Present this case and the following slide and invite candidates to discuss in their groups the initial resuscitation and then think about the differential diagnosis of reduced conscious level and the specific interventions that should be given.

Invite candidates to provide answers to next two slides, including any other key features that they can think of before summing up. Eg

headaches, acute onset – cerebrovascular event
 headaches, high BP – hypertensive encephalopathy
 vague and inconsistent history, other trauma in an infant – child abuse

Slide 15

Sally's case: Primary assessment and resuscitation

| | On examination | Resuscitation |
|---|--|---|
| A | Snoring | Call for help |
| B | Resp rate 12/min No recession SpO ₂ not recordable | Open and protect airway High flow oxygen |
| C | Heart rate 100/min Pale Cold peripheries BP 100 mmHg systolic | IV/IO access and fluids Blood tests |
| D | AVPU Pupils: sluggish, equal and reactive | Start to warm Reassess |
| E | Hypothermic - temperature 32°C | |

Seriously Ill Child

Allow 2 minutes

Slide 16

Sally's case:
 What emergency treatment?

| Key Feature | Diagnosis | Treatment |
|--------------------------|---------------------------------|-----------------------------------|
| History of epilepsy | Post ictal state | Supportive monitoring |
| Recent trauma | Head injury | Trauma algorithm |
| Known chronic condition | Diabetes Metabolic condition | DKA algorithm |
| Acute onset and fever | Meningitis Encephalitis | Antibiotics Consider aciclovir |
| Possibility of poisoning | Drugs Alcohol Products | Supportive Antidotes |

Seriously Ill Child

Show key features and ask for diagnosis and emergency treatment.

Ask whether there are any other key features / diagnoses not listed here.

E.g.

headaches, acute onset – cerebrovascular event
 headaches, high BP – hypertensive encephalopathy
 vague and inconsistent history, other trauma in an infant – child abuse

The use of the structured approach in these cases will help ensure early and appropriate treatment.

Candidates may practice this in the illness simulations which follow.

Allow 4 minutes

Slide 17



Slide 18

Summary
Rapid assessment

| | |
|-------------------------------|-----------------------|
| Airway & Breathing | Circulation |
| Effort | Heart rate |
| Efficacy | Capillary refill time |
| Effects | Blood pressure |
| | Skin temperature |
| | Disability |
| | Conscious level |
| | Posture & Pupils |

Seriously Ill Child

Remember to include tone & colour when you mention posture

Closure – include that further opportunities to discuss assessment and management of illnesses raised in the Serious Illness plenary will be in the workshops and illness scenarios.